

Independent claim 1 recites a composite magnetic body, comprising metallic magnetic powder and thermosetting resin. The composite magnetic body has a packing ratio of the metallic magnetic powder of 65 to 90 vol% and an electrical resistivity of at least $10^4 \Omega\cdot\text{cm}$.

Independent claim 16 recites a magnetic element comprising a composite magnetic body and a coil embedded in the composite magnetic body. The composite magnetic body comprises metallic magnetic powder and thermosetting resin. The composite magnetic body has a packing ratio of the metallic magnetic powder of 65 to 90 vol% and an electrical resistivity of at least $10^4 \Omega\cdot\text{cm}$.

$\Omega\cdot\text{cm}$.

Thus, both independent claims recite the feature of a composite magnetic body having a packing ratio of the metallic magnetic powder of 65 to 90 vol%. Neither JP 2-226799 nor

Kugimiya, however, disclose or suggest such a ratio.

JP 2-226799 discloses a magnetic mold body that includes 60 to 75 vol% of soft magnetic powder with mold resin. However, the packing ratio of the metallic magnetic powder is not nearly that high. The soft magnetic powder of JP 2-226799 includes (a) at least one of Ni-based ferrite and Mg-based ferrite and (b) at least one of Mn-based ferrite and metallic magnetite powder. The volume mixture of (a) to (b) is 1:1 to 9.5:0.5. Since ferrite is not a "metallic" magnetic component, the highest volume percentage of metallic magnetite powder is obtained when (b) is only metal magnetic powder and the ratio of (b) to (a) is 1:1. In such a case, the volume percentage of metallic magnetic powder disclosed by JP 2-226799 cannot be greater than 37.5 vol% (*i.e.*, 75/2 vol%). Therefore, JP 2-226799 does not disclose or suggest a composite magnetic body having a packing ratio of the metallic magnetic powder of 65 to 90 vol%.

Kugimiya does not remedy the deficiencies of JP 2-226799. *Kugimiya* discloses a magnetic sintered composite material that includes grains of magnetic metal or alloy and a

continuous phase of a dielectric thin film formed on the grains. *Kugimiya* does not disclose or suggest, however, a composite magnetic body that has a packing ratio of the metallic magnetic powder of 65 vol% to 90 vol%.

Accordingly, claims 1 and 16 are allowable over JP 2-226799 and *Kugimiya* for the

reasons stated above.

Each of claims 2-15 depends from claim 1. Therefore, Applicants submit that claims 2-15 are allowable for at least the reason that they are dependent upon an allowable base claim. Moreover, each of claims 2-15 recites additional features in combination with the features of claim 1 and is believed allowable in its own right.

In view of the above, favorable reconsideration in the form of a notice of allowance is requested. The Examiner is invited to telephone the undersigned at (612) 371-5237 if there are any issues that prevent the allowance of this application.

Respectfully submitted,

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